

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A force reflecting haptic interface including at least three degrees of freedom and a user interface, the user interface comprising:

a nose section secured to the force reflecting haptic interface, the nose section comprising at least one electrical wiring circuit; and

a user connection section detachably ~~secured~~ coupled to the nose section, the nose section interchangeable with alternative user connection sections, wherein the at least one electrical wiring circuit allows for direction of an electronic signal from the user connection section to the force reflecting haptic interface.

2. (Original) The force reflecting haptic interface of claim 1, wherein the user connection section is selected from the group consisting of a stylus, a pistol grip, a roller ball, a mouse, a joystick, and a steering device.

3. (Original) The force reflecting haptic interface of claim of 1, wherein the user connection section couples to the nose section by a jack and chuck arrangement.

4. (Original) The force reflecting haptic interface of claim 1, wherein the user connection section decouples from the nose section upon application of a load greater than a threshold load value.

5. (Currently amended) The force reflecting haptic interface of claim 1, wherein the user interface further comprises a first user input on the user connection section.

6. (Currently amended) The force reflecting haptic interface of claim 5, wherein the user interface further comprises a second user input on the user connection section.

7. (Original) The force reflecting haptic interface of claim 6, wherein at least one of the first user input and the second user input is customizable by a user.
8. (Original) The force reflecting haptic interface of claim 6, wherein at least one of the first user input and the second user input comprises a switch.
9. (Original) The force reflecting haptic interface of claim 6, wherein at least one of the first user input and the second user input modifies a function of the user interface.
10. (Original) The force reflecting haptic interface of claim 9, wherein the user interface is adapted to function as a force feedback device and a computer mouse.
11. (Original) The force reflecting haptic interface of claim 10, wherein the user interface is adapted to function as a digitizer.
12. (Original) The force reflecting haptic interface of claim 1, wherein the user interface comprises a housing, the housing comprising multiple components that interlock without requiring a fastener.
13. (Original) The force reflecting haptic interface of claim 1 further comprising a yoke assembly coupled to the nose section.
14. (Original) The force reflecting haptic interface of claim 13, wherein the yoke assembly comprises two hinged halves adapted to capture a pair of projections extending from the nose section.
15. (Original) The force reflecting haptic interface of claim 14, wherein each projection is adapted to mate with a bearing and at least one of the projections is adapted to mate with a sensor for outputting a signal representative of a position of the user interface relative to the yoke assembly.

16. (Original) The force reflecting haptic interface of claim 1, wherein the user interface includes a sensor for outputting a signal representative of a position of the user connection section relative to the nose section.
17. (Original) The force reflecting haptic interface of claim 1, wherein the user interface comprises a docking station.
18. (Original) The force reflecting haptic interface of claim 17, wherein the docking station comprises a projection disposed on one of the user interface and a housing of the haptic interface and a mating recess formed in the other of the user interface and the housing.
19. (Original) The force reflecting haptic interface of claim 18, wherein the docking station further comprises a sensor for indicating mating of the projection in the recess.
20. (Previously presented) The force reflecting haptic interface of claim 1, wherein the user interface is adapted to support a first function and a second function.
21. (Original) The force reflecting haptic interface of claim 20, wherein the user interface is further adapted to support a third function.
22. (Original) The force reflecting haptic interface of claim 20, wherein the first function comprises a force feedback device.
23. (Original) The force reflecting haptic interface of claim 20, wherein the second function comprises a computer mouse.
24. (Original) The force reflecting haptic interface of claim 21, wherein the third function comprises a digitizer.

25. (Original) The force reflecting haptic interface of claim 20, wherein the user interface is switchable between the first function and the second function.

26. (Original) The force reflecting haptic interface of claim 21, wherein the third function is enabled independently from the first function and the second function.

27-53. (Cancelled)

54. (New) A force reflecting haptic interface including at least three degrees of freedom and a user interface, the user interface comprising:

a nose section comprising a pair of projections, each projection adapted to mate with a bearing;

a yoke assembly comprising two hinged halves adapted to capture the pair of projections extending from the nose section, wherein at least one of the projections is adapted to mate with a sensor for outputting a signal representative of a position of the user interface relative to the yoke assembly; and

a user connection section detachably coupled to the nose section, the nose section interchangeable with alternative user connection sections.

55. (New) The force reflecting haptic interface of claim 5, wherein the first user input is connected to the at least one electrical wiring circuit.

56. (New) The force reflecting haptic interface of claim 6, wherein the second user input is connected to the at least one electrical wiring circuit.

57. (New) The force reflecting haptic interface of claim 1, wherein the nose further comprises an electrical connection.

58. (New) The force reflecting haptic interface of claim 1, wherein the user connection section further comprises an electrical connection.

59. (New) The force reflecting haptic interface of claim 6, wherein at least one of the first user input and the second user input is selected from the group consisting of a button, a toggle, and a roller.
60. (New) The force reflecting haptic interface of claim 1, wherein the nose section further comprises a tip.
61. (New) The force reflecting haptic interface of claim 60, wherein the tip comprises at least one of a manual switch and a spring loaded switch.
62. (New) The force reflecting haptic interface of claim 60, wherein the tip comprises optical technology.
63. (New) The force reflecting haptic interface of claim 14, wherein the yoke assembly further comprises a pair of bearings, the pair of bearings adapted to capture the pair of projections.
64. (New) The force reflecting haptic interface of claim 63, wherein the two hinged halves clamp the pair of bearings with positive pressure.